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1. Lehrstuhl für Organishch-Chemische Technologie an der Universität, Sofia. Vorgelegt von Akademiemitglied G. Rankoff [Rankov, G.].

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Vol.10, no. 11, Nov. 1955
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So: Eastern European Accession Vol. 5 No. 1 Jan. 1956

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(Bulgaria--Kindergarten)

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eff. of chlorpromazine & insulin on blood sugar in rabbits (Pol))
(CHLORPROMAZINE, eff.
on blood sugar in exper. hypothermia in rabbits (Pol))
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same)
(BLOOD SUGAR, eff. of drugs on
chlorpromazine & insulin in exper. hypothermia in rabbits (Pol))

Karajosifidis K.

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Role of lipotropic factors in the regulation of disorders of vitamin A metabolism. Polskie tygod. lek. 12 no.44:1681-1684 4 Nov 57.

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(VITAMIN A DEFICIENCY, exper.
ethyl ether-induced liver depletion, eff. of methionine & vitamin B12 (Pol))
(ETHER, ETHYL, eff.
exper. liver vitamin A depletion, eff. of methionine & vitamin B12 (Pol))
(METHIONINE, eff.
on liver vitamin A depletion induced by ethyl ether, with vitamin B12 (Pol))
(VITAMIN B12, eff.
on liver vitamin A depletion induced by ethyl ether, with methionine (Pol))

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(DUODENUM, metab.
proteases in child., determ. (Pol))
(FECES
same)
(PROTEASES, determ.
in duodenum & feces in child. (Pol))

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Pneumoconioses in Yugoslavia; silicosis in the Bor mine. Glasn. hig. inst., Beogr. 3 no.1-2:1-23 Jan-June 54.
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(ALLERGY etiol.)
(FLOUR)
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Cutaneous hypersensitivity to cement and to chromates in cement industry workers. Acta med. iugosl. 13 no.3:332-338 '59.

1. Clinique Dermatologique et Centre des maladies professionnelles de la Faculte de Medecine de Belgrade.
(DERMATITIS VENENATA etiol.)
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1. Klinisches Zentrum fur professionale Krankheiten der Medizinischen Fakultat in Belgrad.
(ALLERGY etiol.)
(OCCUPATIONAL DISEASES etiol.)

YUGOSLAVIA

Dr S. KARAJOVIC, B. PANOV, M. JEREMIC, Dr Ing D. DJURIC, Min/eralogist/ M. VUKOLIC and Fiz/icki/ Hem/icar/ (Physical Chemist) D. GVOZDANOVIC, Institute of Occupational Medicine (Institut za higijenu rada) Belgrade.

"Protecting Workers from Radiation Sources in Uranium Mines and in Work with Radioactive Materials."

Belgrade, Higijena, Vol 14, No 2-3-4, 1962; pp 154-168.

Abstract: Presentation and discussion of data accumulated during the 4 years' activity of the Department for Protection from Radiation (Odeljenje za radiolosku zastitu) of the Institute of Occupational Medicine of the Peoples' Republic of Serbia (NR/=Narodna Republika/ Srbija;) Methods for monitoring exposure, radioactive levels in water, air, dust under and above-ground (from mines Kalna, Gabrovnica, Gorenja Vas;) hemograms of 94 miners and 142 workers (95 men) in uranium technology; discussion of main problems and dangers, remedies advocated planned or in effect. Five tables, 2 photographs, 5 charts-diagrams; 13 Western and 4 Yugoslav references.

1/1

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1. Institut za medicinu rada Socijalisticke Republike Srbije, Beograd.

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1. Ministry of Construction, Budapest.

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Munka 8 no.7:7-8 Jl '58.

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Contribution to the problem of juvenile hypertension. Cor Vasa 3 no.4: 264-272 '61.

1. Institut Pedagogique de l'Academie des Sciences, Sofia.

(HYPERTENSION statistics)

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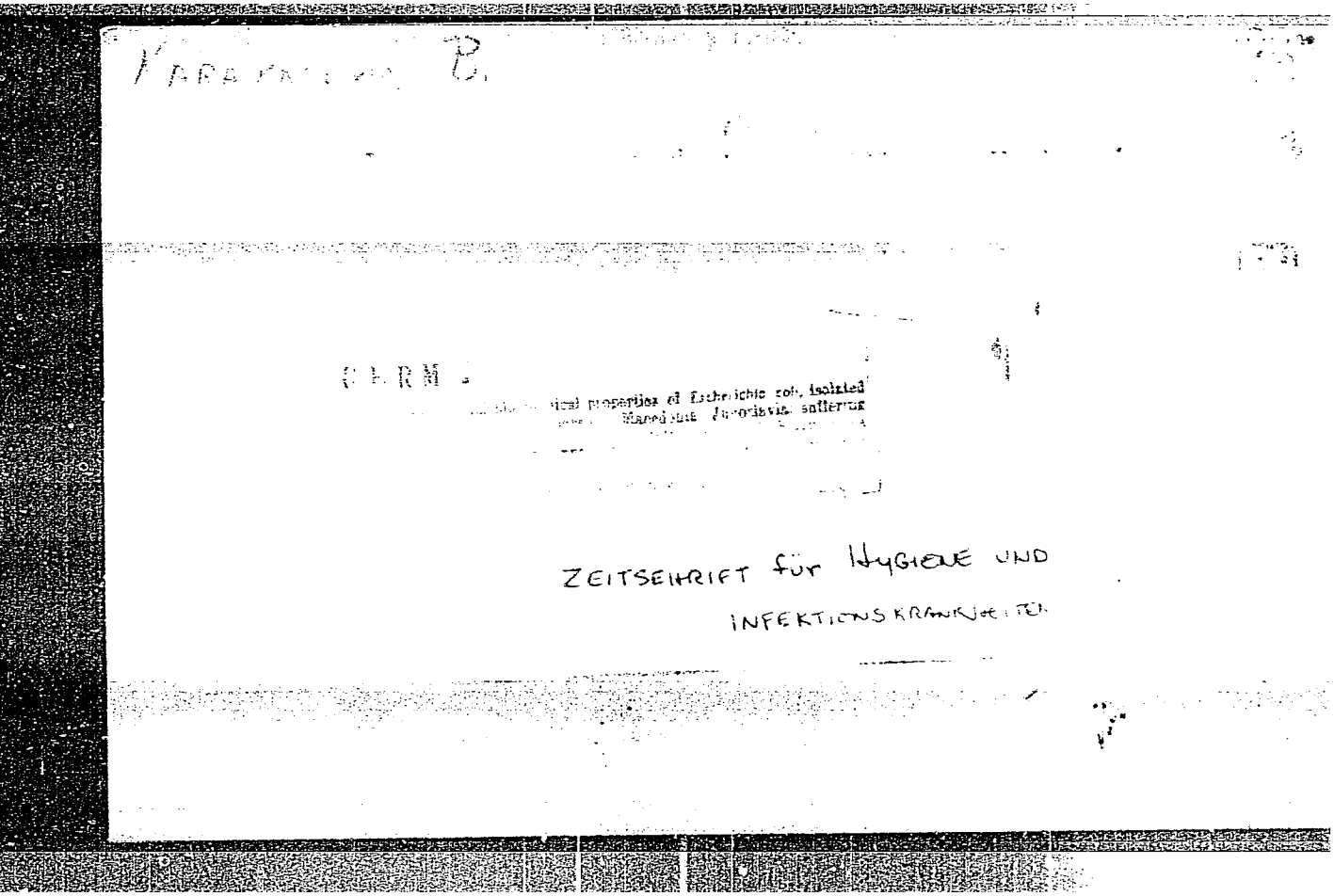

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1. Mikrobioloski institut Med. fakulteta, Skoplje.
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Isolation of Salmonella from Vardar waters with membrane filters. Higijena, Beogr. 7 no.1-4:209-215 1955.

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membrane filter isolation from water supply (Ser))
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Phosphatase test in differentiation of Micrococcus pyogenes from non-pathogenic types of micrococci. Higijena, Beogr. 7 no. 1-4:259-263 1955.

1. Mikrobiloski institut Medicinskog fakulteta, Skoplje.
(MICROCOCCUS PYOGENES,
differ. from non-pathogenic Micrococci, phosphatase test comparative value (Ser))
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Epidemiological and microbiological problems of aerogenic infections. Higijena 16 no. 2:71-87 ' 64.

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TECHNOLOGY

KARAKASEVIC, R. "Kolins" or "Pi" filter. p. 353; Yugoslav antennas. p. 354.

Vol. 11, no. 12, Dec. 1957

Monthly List of East European Accessions (EEAI) LC, Vol. 8, no. 3
March 1959 Unclass

APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000720530001-3"

KARAKASEVIC, M., dipl. hem.; DACA, Kemal, dipl. hem.; BENCINA, Silva, ing.

Complexometric determination of lead in lead ores and their processing products. Kem ind 10 no.2:50-51 F '61.

KARAKASEVICH, K.

Geographical problems of fruit growing in Csongrad County.

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Budapest, Hungary

SO: Monthly Index of East European Accessions (EEAI) LC, Vol. 7, No. 3, March 1958

KARAKASH, A.I.

Prognosis of water temperature in the Barents Sea. Trudy TSIP no.57: 3-59 '57. (MLRA 10:9)

(Barents Sea--Ocean temperature)

AUTHOR: Karakash, A. I. SOV/50-58-9-3/19

TITLE: The Forecast of the Position of the Ice Front in the Barents Sea (Prognoz polozheniya kromki l'da na Barentsevom more)

PERIODICAL: Meteorologiya i gidrologiya, 1958, Nr 9, pp. 16 - 21 (USSR)

ABSTRACT: Taking the Barents Sea as example the author shows how the opinion on the interrelations of marine phenomena on the one hand and atmospheric phenomena on the other hand are formed in the course of a longer period. Two opinions are represented in a survey of publications (Refs 4,5,9): a) Glaciation of the sea and its conditions of temperature are mainly due to heat transfer by currents. b) According to the other point of view the main part is played by atmospheric phenomena. Although the later papers (Refs 3,8-10, 13) did not give any sufficiently proved forecasts which meet modern demand they were very important for the finding out of the conditions in the sea (just as the papers mentioned in Refs 3,5,7,9). It was possible to ascertain the basic and leading factors which determine

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the state of ice in the sea. Only after sufficient informations concerning the state of ice, temperature and salt content were obtained, it became possible to generalize the results and to work out methods for long-term forecasts of glaciation and the position of the ice front. The glaciation of the Barents Sea reaches its climax in April, then it is gradually reduced. The greatest shift to the North is reached from June to July, it is less intensive in May and August. During the warm season the density of the icecover on the entire sea is considerable and amounts to from 8-10 marks. Only in some years greater parts of free water may be observed. After having mentioned the four basic features of reference 6 the author analyzes them with respect to the Barents Sea and draws the conclusion that the losses of heat and the amounts of heat which are caused by the Atlantic current during autumn and winter determine more or less the condition of temperature and ice. The losses of heat which occur during this season are proportional to the difference between water and air temperature. They may therefore be determined

without computations of the heat balance. It is true, however, that for the determination of the relative losses of heat the air temperature can only be used in the extreme north-western part of the sea (Ref 6). The heat transported by the Atlantic current into the Barents Sea is proportional to the velocity of the current. On the other hand it depends on the intensity of air circulation over the North Atlantic and over the Barents Sea and is characterized by a relatively high coefficient of correlation (0,80). Based upon this phenomenon the author set up equations by means of which it is possible to compute in advance the average glaciation of the sea per month. Since they have the same parameters one single equation can be derived for the computation of the monthly and seasonal glaciation:

$\Delta s = (-0,23t - 0,26\ z^{0,5} + 21,35)k$, with $\Delta s$ denoting the anomaly of glaciation, t - the air temperature from September to February, z - an index which characterizes the cyclones in the Barents Sea during the same months

as well as in the North Atlantic, k - a coefficient which amounts to 1,8 in the mentioned season and in April, 2,0 in June and 2,6 in July-August. The total coefficient of correlation is equal to 0,87. Thus, by means of air temperature and the index of intensity of the cyclones in autumn and winter the glaciation and the position of the ice front may be computed for 1 to 5 months in advance. There are 1 figure and 13 references, 7 of which are Soviet.

KARAKASH, A.I.

Forecasting the beginning of the spring and fall changes in the ice situation in the southeastern part of the Barents Sea. Trudy TSIP no.76:3-14 '58. (MIRA 12:2)
(Barents Sea--Ice)

L 41760-66 EWT(1) GW

ACC NR: AT6006567 (N) SOURCE CODE: UR/2546/65/000/142/0013/0015

AUTHOR: Karakash, A. I.

24
B+1

ORG: none

TITLE: Ice forecasting in non-Arctic seas

SOURCE: Moscow. Tsentral'nyy institut prognozov. Trudy, no. 142, 1965. Morskiye prognozy i raschety (Marine forecasts and calculations); materialy Vsesoyuznogo soveshchaniya, noyabr' 1963 g., 13-15

TOPIC TAGS: sea ice, long range weather forecasting

ABSTRACT: Various methods of ice forecasting are enumerated and suggestions for improving the organization, collection, and evaluation of the basic elements are given. Long range forecasting of ice-phase advance is based on the evaluation of such factors as air temperature, water temperature, the thickness and area of an ice cover, as well as atmospheric pressure and circulation. The author concludes that no single ice forecasting method can be used for the non-Arctic seas, and that ice forecasting should be based on the continuous observation of temperature, ice drift, ice thickness, current velocity, and atmospheric pressure. He also urges an increase in the number of buoy stations.

SUB CODE: 04,08/ SUBM DATE: none

Card 1/1

KARAKASH, A.I.

Ice forecasts on non-Arctic seas. Trudy TSIP no.142:13-15 '65.
(MIRA 18:10)

KARAKASH, A.I.

Some characteristics of hydrological conditions in the equatorial zone of the Atlantic Ocean. Meteor. i gidrol. no.12:22-26 D '63. (MIRA 17:3)

1. TSentral'nyy institut prognozov.

KARAKASH, D.F.

Planning dispensary care for the rural population. Vrach. delo no. 3:114-115 Mr '61. (MIRA 14:4)

1. Kafedra organizatsii zdravookhraneniya (zav. - prof. Z.A. Gurevich) Khar'kovskogo meditsinskogo instituta.
(MEDICAL CARE)

GROMOV, A.S., prof., doktor med.nauk, otv.red.; GOTSKAYA, Z.A., dotsent, red.; GORITSKAYA, V.V., dotsent, red.; KARAKASH, M.I., nauchnyy sotrudnik, red.; BADAYEV, D.A., tekhn.red.

[Problems in the immunology, microbiology, and epidemiology of intestinal infections] Voprosy immunologii, mikrobiologii i epidemiologii kishechnykh infektsii. Dnepropetrovsk, 1959. 256 p. (MIRA 14:2)

1. Dnepropetrovskiy nauchno-issledovatel'skiy institut epidemiologii, mikrobiologii i gigiyeny im. N.F.Gamaleya. 2. Direktor Dnepropetrovskogo nauchno-issledovatel'skogo instituta epidemiologii, mikrobiologii i gigiyeny im. N.F.Gamaleya (for Gromov).
(INTESTINES--DISEASES)

SPIVAK, G.V.; NIKOLENKO, V.F.; CHERNOMORDIK, A.B.; KARAKASH, R.I.

Studies on the antimicrobial effects of certain antibiotics on the whooping cough bacillus. Antibiotiki 6 no.4:350-352 Ap '61. (MIRA 14:5)

1. Dnepropetrovskiy nauchno-issledovatel'skiy institut epidemiologii, mikrobiologii i gigiyeny imeni N.F.Gamalei.
(ANTIBIOTICS) (HEMOPHILUS PERTUSSIS)

NIKOLENKO, V.F.; SPIVAK, G.V.; KARAKASH, R.I.; LEVINA, G.V.

Effect of antibiotics on the rate of elimination of the disease pathogen from patients with whooping cough. Vop.okh.mat.i det. 7 no.4:44-46 Ap '62. (MIRA 15:11)

1. Iz Dnepropetrovskogo nauchno-issledovatel'skogo instituta epidemiologii, mikrobiologii i gigiyeny.
(WHOOPING COUGH) (ANTIBIOTICS)

36765
S/081/62/000/001/059/067
B162/B101

11.9400

AUTHORS: Vaynshtok, V. V., Kartinin, B. N., Karakash, S. I., Avchina, S. A.

TITLE: Investigation of lithium greases thickened with soaps of natural and synthetic acids

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 1, 1962, 448, abstract 1M171 (Tr. Mosk. in-t neftekhim. i gaz. prom-sti, no. 32, 1960, 11 - 26)

TEXT: It is established that the cooling methods used in the production of Li greases do not make it possible to control the process of crystallization of the thickener and lead to the production of low-quality products with a polydisperse structure. Greases thickened with technical stearate of Li, obtained by isothermic crystallization at 130°C possess optimum properties and are characterized by a structure formed of elementary particles of uniform shape and size. High-quality greases can be produced with Li-soaps of technical 12-hydroxystearic acid, and also with Li-soaps of synthetic $C_{10} - C_{16}$ and $C_{10} - C_{21}$ carboxylic acids, the

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B162/B101

Investigation of lithium greases...

greatest thickening capacity being found in Li-soap of $C_{10}$ - $C_{16}$ acids. [Abstracter's note: Complete translation.]

Card 2/2

"APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000720530001-3"

L 45714-66 EWT(m)/T DJ
ACC NR: AP6026501 (A) SOURCE CODE: UR/0318/66/000/005/0025/0029

AUTHOR: Vaynshtok, V. V.; Karakash, S. I.; Levento, R. A.; Kras kovskaya, M. I.

ORG: Moscow Institute of Petrochemical and Gas Industry im. I. M. Gubkin (Moskovskiy institut neftekhimicheskoy i gazovoy promyshlennosti)

TITLE: Synthetic fatty acids as raw material for lithium greases

SOURCE: Neftepererabotka i neftekhimiya, no. 5, 1966, 25-29

TOPIC TAGS: fatty acid, grease, soap

ABSTRACT: The paper reviews the results of studies of synthetic fatty acids (SFA) as raw materials for the preparation of lithium greases. It is shown that such greases prepared from SFA have properties equivalent to those of similar greases prepared from stearic acid. The best raw material for the production of lithium greases are saponified fractions of thermally modified SFA, particularly $C_{10}$-$C_{16}$. It is necessary to organize their production in order to meet the needs of the lithium grease industry. As raw material for the production of lithium greases, SFA (particularly those obtained without thermal modification) have a number of disadvantages, which result from a high content of unoxidized paraffin, unsaponified oxygen-containing products, and products insoluble in petroleum ether. The development of methods for improving the quality of SFA is necessary. Orig. art. has: 4 tables.

SUB CODE: 11/ SUBM DATE: none/ ORIG REF: 007

Card 1/1 UDC: 665.123.002.614:665.637.6.002.3

32337
S/081/61/000/024/073/086
B151/B101

11.9400 also 1583

AUTHORS: Vaynshtok, V. V., Kartinin, B. N., Karakash, S. I.

TITLE: The effect of additions of lead soaps on the structure and properties of lithium greases

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 24, 1961, 471 - 472, abstract 24M97 (Tr. Mosk. in-t neftekhim. i gaz. prom-sti, no. 32, 1960, 27 - 40)

TEXT: It has been found that the optimum temperature of crystallization of Li soap in the preparation of greases is 110°C. However, at this temperature it is not possible to prepare greases containing lead soaps, the crystallization of which proceeds below room temperatures. In these conditions it is possible to obtain lithium-lead greases. The addition of Pb stearate to greases thickened with Li stearate lowers their drop-fall temperatures. The colloidal stability of the greases firstly drops (on the introduction of up to 20% Pb stearate, based on the soap thickener) and then improves again. The limiting shear stress drops at

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The effect of additions of...

first (up to 30% Pb stearate), then rises (40% Pb stearate) and then drops again (50% Pb stearate). The viscosity of Li greases shows little effect from the introduction of Pb stearate. The mechanical stability of the greases, evaluated by the change in residual limiting shear stress after their breakdown in a mixer using a penetrometer, drops with increasing concentration of lead soap. The preparation of Li greases containing more than 50% Pb stearate was not possible, although greases thickened with Pb stearate only were obtained. Examination with an electron microscope showed that the structure of the Li soap changes on the addition of Pb stearate to the grease. Similarly, the dimensions and form of the crystallites of the lead soap depend on the relative proportion of Li stearate present in the grease. [Abstracter's note: Complete translation.]

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32338
S/081/61/000/024/074/086
B151/B101

11.9400 also 1583

AUTHORS: Avchina, S. A., Karakash, S. I., Kartinin, B. N.

TITLE: A method for evaluating the limiting shear stress of consistent grease with an МНИ-2(MNI-2) plastometer

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 24, 1961, 472, abstract 24M98 (Tr. Mosk. in-t neftekhim. i gaz. prom-sti, no. 32, 1960, 141 -151)

TEXT: The operating unit of this apparatus for determining the limit of solidity (limiting shear stress), $\tau_{nr}$, of soft greases consists of two parallel immovable plates, between which there is located a third plate, joined to a balance beam. The grease under test is smeared between the plates, the surface of which is covered with grooves to prevent slippage at the walls. Onto the second balance beam is fixed a cup, into which water is poured at a fixed rate. As the water gradually fills the cup, the load on the plate increases and the plate moves in the grease. The construction of the apparatus allows one to find beforehand the amount

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A method for evaluating the...

of displacement of the plate at which the contacts of a relay are closed and the filling of the cup with water ceases. The weight of the cup with the water at this moment corresponds to the load on the plate at which a given displacement of the plate in the grease takes place. By relating the load to the area of contact between the plate and the grease, $\tau_{nr}$ of the grease can be calculated. The magnitude of the path of displacement of the plate is chosen by 30% - 40% higher than the limiting value of the elastic deformations (found by preliminary experiments). For Li and Ca greases this value is usually 0.1 - 0.12 mm, and for hydrocarbon greases 0.05 - 0.06 mm. The reproducibility of parallel determinations for the measurement of $\tau_{nr}$ is ± 10 - 18% of the mean. [Abstracter's note: Complete translation.]

Card 2/2

VAYNSHTOK, V.V.; KARTININ, B.N.; KARAKASH, S.I.

Lead soaps as modifiers of the structure of lithium oils. Trudy MINKHiGP no.37:185-199 '62.

Grease on a base of lead and aluminum soaps. Ibid.:200-214
(MIRA 17:3)

KARAKASH, Ye.S.

Forecasting ice conditions at the western coast of the middle Caspian. Trudy GOIN no.61:142-152 '61. (MIRA 14:10)
(Caspian Sea—Sea ice)

KARAKASH, Ye.S.

Prognosis of ice conditions in the northern part of the Caspian Sea. Trudy GOIN 67:118-131 '62. (MIRA 15:7)
(Caspian Sea--Sea ice)

KARAKASH, Ye.S.

Variability of the ice limit in the northern Caspian and the possibility of predicting it. Trudy GOIN no.76:80-103 '64
(MIRA 18:1)

KARAKASH, Ye. S., Cand of Geog Sci -- (diss) "Hydrological navigation conditions, the account and prognosis of the basic hydrological elements of the area of the port of Zhdanov." Moscow, 1957, 8 pp (State Oceanographic Institute; Main Admin of Hydrometeorological Service under Council of Ministers USSR), 100 copies (KL, 33-57, 88)

KARAKASH, Ye.S.

Special features of hydrological regimes as in the example of the Zhdanov Harbor. Trudy GOIN no.34:5-72 '57. (MLRA 10:9)
(Zhdanov region--Hydrography)

KARAKASH, Ye.S.

Calculating the prenavigational depth of the approzching canal to the Zhdanov Harbor. Trudy GOIN no.34:188-197 '57. (MIRA 10:9)
(Zhdanov region--Hydrography)

KARAKASH, Ye. S.

Variations in the amount of ice and the position of the edge of ice in the northern Caspian. Trudy GOIN no.54:5-21 '60.
(MIRA 14:4)
(Caspian Sea--Ice)

KARAKASH, Ye.S.

Possibility of predicting the distribution of ice at the western shores of the central Caspian. Trudy GOIN no.71: 96-99 '64. (MIRA 17:10)

TODOROV, I.; KARAKASHEV, At.

Universal chamber for paper electrophoresis. Suvrem. med., Sofia 7 no.6:78-83 1956.

1. Iz Katedrata po detski bolesti pri VMI - Sofiia (Zav. katedrata: prof. L. Rachev).

(ELECTROPHORESIS, apparatus and instruments, universal chamber for paper electrophoresis (Bul))

KARAKASHEV, At

TODOROV, I.; KARAKASHEV, At.

Filter paper electrophoresis of lipo- and glycoproteins in the blood. Suvrem. med., Sofia 7 no.6:84-88 1956.

1. Iz Katedrata po detski bolesti pri VMI - Sofiia.
(Zav. katedrata: Prof. L. Rachev).
(BLOOD PROTEINS, determination,
glycoproteins, electrophoresis (Bul))
(LIPOPROTEINS, in blood,
electrophoresis (Bul))

KARAKASHEV, V.A.

124-58-6-6306D

Translation from: Referativnyy zhurnal, Mekhanika, 1958, Nr 6, p 5 (USSR)

AUTHOR: Karakashev, V.A.

TITLE: An Investigation of Ballistic Errors in the Sensor Elements of Gyroscopes Used to Record the Angular Motion of Ships (Issledovaniye ballisticheskikh pogreshnostey chuvstvitel'nykh elementov giroskopicheskikh registratorov kachki korablya)

ABSTRACT: Bibliographic entry on the author's dissertation for the degree of Candidate of Technical Sciences, presented to the Leningr. in-t tochnoy mekhan. i optiki (Leningrad Institute of Exact Mechanics and Optics), Leningrad, 1957.

ASSOCIATION: Leningr. in-t tochnoy mekhan. i optiki (Leningrad Institute of Exact Mechanics and Optics), Leningrad.

Card 1/1 1. Gyroscopes--Performance 2. Gyroscopes--Errors

KARAKASHEV, V.A., kand.tekhn.nauk

Inertial navigation systems. Izv.vys.ucheb.zav.; prib. no.6: 118-120 '58. (MIRA 12:12)

1. Leningradskiy institut tochnoy mekhaniki i optiki.
(Navigation)

KARAKASHEV, V.A., kand. tekhn. nauk

Gyrostabilized platform with the period of natural vibrations T = 84,4 minutes. Izv. vys. ucheb. zav.; prib. no.2:67-75 '59. (MIRA 13:2)

1.Leningradskiy institut tonkoy mekhaniki i optiki. Rekomendovana kafedroy giroskopicheskikh i navigatsionnykh priborov.
(Gyroscope--Vibration) (Navigation)

86346

S/146/60/003/005/006/017
B019/B054

132510

AUTHOR: Karakashev, V.A.

TITLE: Effect of the Drift of Gyroscopes on the Motion of a Gyrostabilized Platform at T = 84.4 Minutes

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy. Priborostroyeniye, 1960, Vol. 3, No. 5, pp. 44 - 51

TEXT: The drift of a gyroscope has a destructive effect on the motion of a stabilized platform, and produces an error in the output signals of the inertial system. These signals are intended for a continuous determination of the coordinates of the object. The author studies the behavior of a gyrostabilized, geographically oriented platform. He obtains an analytical expression which describes the motion of a platform gyrostabilized in three axes, the initial conditions and the angular velocities being considered. He finds the errors for the latitude and longitude determination of an object moving on the earth. The whole investigation is based on the assumption that the gyroscope has no mechanical errors. A discussion of results made it clear that a stabilization of all axes of a platform by two gyroscopes compensates the effect of the components

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Effect of the Drift of Gyroscopes on the Motion of a Gyrostabilized Platform at T = 84.4 Minutes

S/146/60/003/005/006/017
B019/B054

of instantaneous angular velocities, and avoids the errors of inertia of the gyroscope. It is necessary to correct the platform in the azimuth, and to correct the inertial system in regular intervals. The publication of this article was recommended by the Kafedra giroskopicheskikh i navigatsionnykh priborov (Chair of Gyroscopic and Navigation Instruments). There are 2 figures and 3 Soviet references.

ASSOCIATION: Leningradskiy institut tochnoy mekhaniki i optiki (Leningrad Institute of Precision Mechanics and Optics)

SUBMITTED: April 25, 1960

30483

S/146/61/004/005/008/011
D221/D305

13.2600

AUTHOR: Karakashev, V.A.

TITLE: On the theory of an inertia system

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy. Priborostroyeniye, v. 4, no. 5, 1961, 94-104

4

TEXT: The analyzed inertia system is illustrated in Fig.1. The stabilized platform with three axes maintains its position by the "equatorial suspension" and two orthogonally disposed accelerometers $A_x$ and $A_y$. The maintenance of the accelerometer platform geographical system of coordinates is ensured by sensing systems. Special computer devices eliminate the Coriolis and transfer accelerations from the output signals of the accelerometers which are fed to the inputs of the integrators. A description is given of the sensing loops. Three floating integrating gyroscopes are used as sensing elements of the gyro-stabilized platform. Their kinematic moments are perpendicular to the axes of stabilization, with output

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On the theory...

signal distributed by the converter of coordinates between the corresponding servos of the platform. The current latitude and longitude of the object are obtained by special transducers of angles TA $\varphi$ and TA $\lambda$. The gyrostabilized platform is related to the coordinate system $x_g y_g z_g$, and is designed to hold the supporting system of coordinates, $\xi\eta\zeta$, stationary with respect to stars. The equations of precession motion of the platform without consideration of friction moments are quoted. The gyroscopic moments due to angular speed of the platform are neglected. The motions of floating gyros in conditions of geometrical stability without regard to time constant or inertia errors in the case of linear transducers of angles are determined by

$$u_{c1} = \frac{k_c H}{p k_T}\left(\omega_{x_r} + \frac{M_{B2}}{H}\right),\ u_{c2} = \frac{k_c H}{p k_T}\left(\omega_{y_r} - \frac{M_{B1}}{H}\right),\ u_{c3} = \frac{k_c H}{p k_T}\left(\omega_{z_r} - \frac{M_{B3}}{H}\right) \quad (3)$$

where $k_T$ and $k_c$ are the coefficients of damping and of amplifica-

Card 2/6

On the theory...

tion of the angle transducer; $M_{Bi}$ are moments at the output axes of the gyros. When the latter have a small drift, then the angular deviation of coordinates $\xi\eta\zeta$ during large periods of time will be low, and they will be neglected. The assumptions permit the equations of precession motion of the platform to be deduced. As the platform of the accelerometers has two degrees of freedom in relation to the gyro-stabilized platform, then it is necessary to deduce two differential equations for the dynamics of the sensing loops. Fig. 1 reveals that theoutput signals of the secondary integrators fed to servos will in this case act like an undamped pendulum with a period of T = 84.4 minutes. After deducing the differential equations, the author provides the expressions for the angles of deviation of the platform in the coordinates $\xi_o \eta_o \zeta_o$. On the assumption that the Coriolis and the transfer acceleration components are eliminated, the approximate accelerations in the case of small speed of the object are given by

$$a_x = pV_2 + pV_1\delta - g\alpha; \quad a_y = pV_1 - pV_2\delta - g\beta. \qquad (8)$$

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On the theory...

After some mathematical elaborations, the equation of the accelerometer platform is derived. The components of the vector of angular speed in the drift along the axes of geographical coordinates are indicated in a table. In the actual designs use is made of gyroscopes with a small drift speed. To investigate the effect of drift of the gyro-stabilized platform on the motion of the accelerometer platform, as well as on the errors in the output signals of the system it is assumed that the moments vary according to the law $M_{B1} = a_1 t + a_2$; $M_{B2} = b_1 t + b_2$, and $M_{B3} = c_1 t + c_2$. The analysis reveals that the motion of the accelerometer platform in the particular case of moments $M_{Bi}$ has two periods of T = 84.4 and T = 24 hrs. It is assumed that the errors in determining the current coordinates of the object, $\varphi$ and $\lambda$ are constant due to the small speed of the latter. The equation quoted indicates that in the simple case, errors increase with time. Finally, the errors in determining latitude and longitude of the object are considered. A set of equations is derived which reveal that minimum errors in measuring latitude

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On the theory...

and longitude for the accepted law of moment variation take place when there is a constant drift of gyroscopes. This leads to a conclusion that the investigated system can operate without additional correction only within relatively short periods of time. This article was recommended by the Kafedra giroskopicheskikh i navigatsionnykh priborov (Department of Gyroscopic and Navigational Instruments). There are 3 figures, 2 tables and 3 references: 2 Soviet-bloc and 1 non-Soviet-bloc. The reference to the English-language publication reads as follows: I.M. Slater and D.B. Duncan Inertial navigation, v. 15, no. 1, 1956.

ASSOCIATION: Leningradskiy institut tochnoy mekhaniki i optiki (Leningrad Institute of Precision Mechanics and Optics)

SUBMITTED: January 26, 1961

Card 5/6

KARAKASHEV, V.A.

Alignment of a gyrostabilized platform of an inertial horizon system. Izv. vys. ucheb. zav.; prib. 7 no.1:103-110 '64.
(MIRA 17:9)

1. Leningradskiy institut tochnoy mekhaniki i optiki. Rekomendovana kafedroy giroskopicheskikh i navigatsionnykh priborov.

ACCESSION NR: AP4019001 S/0146/64/007/001/0103/0110

AUTHOR: Karakashev, V. A.

TITLE: Alignment of the stabilized platform of a horizon inertial system

SOURCE: IVUZ. Priborostroyeniye, v. 7, no. 1, 1964, 103-110

TOPIC TAGS: stabilized platform, gyrostabilized platform, gyrostabilized platform alignment, inertial navigational system, initial platform alignment, three axis stabilized platform

ABSTRACT: A precession theory of the automatic orientation of a three-axis stabilized platform in a geographical coordinate system is set forth. The inertial system examined in the article differs from those recently published elsewhere in the scheme of its computing device. This scheme imparts a gyrocompass effect which ensures an automatic initial alignment of the platform at the point of departure. Equations describing the motion of the stabilized platform on a

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ACCESSION NR: AP4019001

stationary base are set up, as well as the equations for integrator output errors that depend on some instrument errors. It is claimed that a suitable selection of the system parameters will bring about an alignment of the stabilized platform with an accuracy determined by the instrument errors in a short time in moderate latitudes. Orig. art. has: 2 figures and 20 formulas.

ASSOCIATION: Leningradskiy institut tochnoy mekhaniki i optiki (Leningrad Institute of Fine Mechanics and Optics)

SUBMITTED: 21Mar63 DATE ACQ: 23Mar64 ENCL: 00

SUB CODE: AE, CG NO REF SOV: 001 OTHER: 004

Card 2/2

SADYKH-ZADE, E.S.; ISMAILOV, D.Kh.; KARAKASHEV, V.K.

Effect of methods for condensation on the drop in reservoir pressure. Izv. vys. uchab. zav.; neft' i gaz. 8 no.5:43-46 '65. (MIRA 18:7)

1. Azerbaydzhanskiy institut nefti i khimii im. M.Azizbekova i Azerbaydzhanskiy nauchno-issledovatel'skiy institut po dobyche nefti

KARAKASHEVA, E.

USSR

Preparation and structure of some chloro derivatives of phenothiazine. I. Preparation and structure of some monochloro derivatives of N-alkyl substituted phenothiazine sulfones. D. S. Angelov and E. Karakashova. *Bull. inst. chim. acad. bulgare sci.* 2, 115-24 (1953).—A soln. of *N*-methyl-2-nitrophenothiazine oxide (cf. Kehrmann, *C.A.* 13, 1712) in 12 ml. glacial AcOH was treated with 15–20 ml. 30% $H_2O_2$ during 2–2.5 hrs. with continuous boiling. The separated ppt. upon cooling, was recrystd. from $Ac_2O$ giving 84% *sulfone* (I), m. 219°. Similarly *N-ethyl-2-nitrophenothiazine sulfone* (II), m. 252° was obtained from the oxide. Reduction of 2.9 g. I with 3.6 g. Sn and 25 ml. 25% HCl gave 1.8 g. *N-methyl-2-aminophenothiazine sulfone* (III); similarly II gave the corresponding *amine*. Diazotization followed by treatment with $CuCl_2$ of III yielded 42% *N-methyl-2-chlorophenothiazine sulfone* (IV), m. 163°. IV was also obtained by the oxidation of *N*-methyl-2-chlorophenothiazine (2.5 g.) with $KMnO_4$ (160 ml. of 2% soln.). G. M.

KARAKASHEVICH

YUGOSLOVIA/ Microbiology. General Microbiology F-1

Abs Jour: Ref Zhur - Biol., No 6, 1958, 24054

Author : Karakashevich, Gazikalovich
Inst : Not given
Title : Use of Phosphatase Test for Differentiation Between Micrococcus Pyogenes and Non-Pathogenic Species of Micrococci.

Orig Pub: Higijena, 1956, 8, No 4, 233-239

Abstract: No abstract.

Card 1/1



KARAKASHLY, K.T.; ARASLY, G.M., red.

[Material culture of the Azerbaijani of the northeastern and central zones of the Lesser Caucasus; an historical and ethnographical study] Material'naia kul'tura azerbaidzhantsev Severo-vostochnoi i TSentral'noi zon Malogo Kavkaza; istoriko-etnograficheskoe issledovanie. Baku, Izd-vo AN Azerbaidzhan. SSR, 1964. 282 p.
(MIRA 18:5)

KARAKASHLY, N., inzh.; SHKLYARUK, A.

A small seagoing tug. Mor. flot 25 no.10:37-38 O '65.
(MIRA 18:11)

KARAKASHLY, N., inzh.; SHKLYARUK, A., inzh.

Transportation of the rolling stock of railroads on the lighter "Ishim-bay." Mor. flot 25 no.7:9-10 Jl '65. (MIRA 18:7)

KARAKASHLY, Z. K.

Dissertation: "Experimental Observations on the Relation of the Course of Certain Immunological Phenomena to the Initial Reactivity of the Organism." Cand Med Sci, Azerbaydzhan State Medical Inst, 24 Jun 54. (Bakinskiy Rabochiy, Baku, 15 Jun 54).

SO: SUM 318, 23 Dec. 1954

VICHEV, Ye.P.; KARAKASHOV, A.V.

Micromethod for the direct complexometric titration of calcium in blood serum. Vop.med.khim. 6 no.4:435-438 Jl-Ag '60. (MIRA 14:3)

1. Research Institute for the Protection of Maternity and Infancy, Sofiya.

(CALCIUM—ANALYSIS)
(BLOOD—ANALYSIS AND CHEMISTRY)

1. KARAKASHYAN, A. A., Eng.

2. USSR (600)

4. Kilns, Rotary

7. Experience with lining newly installed, powerful rotary kilns. TSement No. 6 1952

9. Monthly List of Russian Accessions, Library of Congress, April 1953, Uncl.

VARTANOV, V.M., inzh.; KARAKASHYAN, A.A., inzh.; MILOVANOV, A.F., kand.tekhn.nauk

Chimney built of precast prestressed reinforced refractory concrete. Nov.tekh.mont. i spets.rab. v stroi. 21 no.4:9-11 Ap '59. (MIRA 12:5)

1. Trest Teplomontazh Ministerstva stroitel'stva RSFSR i Laboratoriya zharoupornykh konstruktsiy Instituta betona i zhelezobetona Akademii stroitel'stva i arkhitektury SSSR.
(Chimneys) (Precast concrete construction)

KARAKASHYAN, A.A., inzh.; EYDINOV, Yu.S., inzh., red.

[Precast reinforced concrete smokestacks] Sbornaia zhelezobetonnaia predvaritel'no napriazhennaia dymovaia truba; iz opyta tresta "Teplomontazh," Ministerstva stroitel'stva RSFSR. Moskva, Gosstroiizdat, 1963. 21 p. (MIRA 16:9)

1. Akademiya stroitel'stva i arkhitektury SSSR, Institut organizatsii, mekhanizatsii i tekhnicheskoy pomoshchi stroitel'stvu. 2. Upravlyayushchiy trestom "Teplomontazh" Ministerstva stroitel'stva RSFSR (for Karakashyan).
(Precast concrete construction) (Chimneys)

KARAKASHYAN, A.A., inzh.; KARPUSHIN, I.A.; KUZ'MINOV, I.T., kand.tekhn.nauk

Method of calculating labor productivity in a thermal-electric power station construction trust. Mont.i spets.rab.v stroi. 23 no.6:20-22 Je '61. (MIRA 14:7)

1. Trest Teplomontazh i Nauchno-issledovatel'skiy institut stroitel'noy promyshlennosti.
(Labor productivity) (Electric power-plants)

SOV/124-58-7-7403

Translation from: Referativnyy zhurnal, Mekhanika, 1958, Nr 7, p 12 (USSR)

AUTHORS: Karakash'yan, ~~Z.O.~~ Zaven Ogannesovich

TITLE: The Theory of the Operation of Type SA-3 Automatic Couplers (Teoriya raboty mekhanizmov avtostsepok tipa SA-3)

PERIODICAL: Tr. Mosk. in-ta inzh. zh.-d. transp., 1957, Nr 98, 167 pages, ill.

ABSTRACT: A study is made of the causes of and means for eliminating two important defects in type SA-3 automatic couplers, namely, that of unintended uncoupling and that of premature closure. The latter defect consists in the fact that the counterweight to the pin-holder springs up too soon and blocks the path of the dog (detent). Section I of the article brings out the characteristic elements of the automatic-coupling mechanism, the mutual arrangement of which may contribute to the above-mentioned defects. Considered too is the matter of clearance, the sizes of which also exert an important influence. Section II deals with the dynamics of the operation of the automatic-coupling device while a train is in motion, and the conclusions reached lead to recommendations as to a selection of

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The Theory of the Operation of Type SA-3 Automatic Couplers

clearances that will eliminate premature uncoupling. Section III sets forth the conditions under which premature closure will be eliminated. Sections IV and V deal with the dynamics of the coupling process, the study of which calls for the setting up and solving of a system of nonlinear differential equations. In the setting up of these equations certain simplifying assumptions are adopted, and the approximate integration is done both by the Picard method and by that of expansion into a power series. Both methods yielded a satisfactory agreement of the final results. In Section VI, on the basis of the preceding material, an analysis is made of the problem of how to prevent closure during attempted coupling. Section VII concludes the article with summary observations on the choice of optimum automatic-coupling parameters. The theory propounded by the author with reference to the SA-3 type automatic couplers can, in its general outlines, be applied to the design of automatic couplers of other types also.

S.G. Kislitsyn

1. Railroad car couplings--Theory 2. Railroad car couplings--Effectiveness

POLYAKOV, P.V., inzh.; KARAKAY, P.A., inzh.; SERGIYENKO, N.M.

Automatic regulator for the feeding of a screw press. Masl.-zhir. prom. 26 no.10:32-34 O '60. (MIRA 13:10)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut zhirov (for Polyakov).
2. Krasnodarskiy maslozhirovoy kombinat (for Karakay, Sergiyenko).
(Power presses) (Automatic control)

KARAKAY, P.A., inzh.; SERGIYENKO, N.M.

Remote measurement of a level in open tanks. Masl.-zhir.prom. 28 no.7:40-41 Jl '62. (MIRA 15:11)

1. Krasnodarskiy maslozhirovoy kombinat imeni V.V. Kuybysheva.
(Krasnodarsk--Oils and fats--Storage)
(Liquid level indicators)

KARAKAY, P.A., inzh.

Automatic pressure control of the composition. Masl.-zhir.prom. 28 no.12:32 D '62. (MIRA 16:1)

1. Krasnodarskiy maslozhirovoy kombinat imeni V.V.Kuybysheva. (Pressure regulators) (Automatic control)

ACCESSION NR: AP4044391 S/0195/64/005/004/0742/0745

AUTHOR: Karakchiyev, L. G.

TITLE: Nature of aluminosilicate catalysts

SOURCE: Kinetika i kataliz, v.5, no. 4, 1964, 742-745

TOPIC TAGS: aluminosilicate, catalysis, X-ray analysis, infrared spectrum, thermography, montmorillonite, mullite, aluminum oxide, crystallization

ABSTRACT: The relationship between the structure of aluminosilicate catalysts and their composition was investigated by infrared spectroscopy, X-ray analysis and thermography of samples with $Al_2O_3$: $SiO_2$ ratios varying from 5:95 to 90:10. Aluminosilicate with a high aluminum oxide content (75-90% $Al_2O_3$) shows four low-intensity, blurred rings belonging to the free phase $\gamma$-$Al_2O_3$ in addition to the wide diffusion of the ring due to the amorphous phase. An increase in the annealing temperature to 650C (4 hours) leads to a further crystallization of the free $\gamma$-$Al_2O_3$. The phase composition of aluminosilicate annealed at 650C and the interplanar spacings of the crystalline phase are tabulated. The spectra showed that in the 3-11 $\mu$ range the skeleton of aluminosilicate is similar to that of montmorillonite, but, in contrast to other tested samples, the catalyst with 25% $Al_2O_3$ contained a large amount of Na (about 0.5%). Comparison with different samples shows

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ACCESSION NR: AP4044391

that the presence of sodium in aluminosilicate catalysts catalyzes the crystallization of the phase similar to montmorillonite. The absorption spectra of $\gamma$-$Al_2O_3$ show two wide bands at 500-650 and 700-900 $cm^{-1}$ while the spectra of $SiO_2$ show bands at 465, 800, 1090 $cm^{-1}$. Increasing the $Al_2O_3$ content causes the frequency of the silicate spectra to shift toward the long-wave region. Part of the aluminum oxide enters the silicate skeleton not as a "free" oxide, but by reacting with it and depolymerizing the skeleton. With increasing aluminum oxide content, the oxygen bonds of the type Si-O-Si break and the trimer linkage of the $SiO_2$ skeleton decreases. Thermograms of $Al_2O_3$ catalysts, boehmite and silica gel are shown. Boehmite is converted to $\gamma$-$Al_2O_3$ by heating and loses its water of crystallization in three steps (endothermic effects at 110, 290 and 395C). On heating silicagel, only one endothermic effect is obtained at 110C. During the preparation of the investigated catalysts, amorphous aluminosilicate structures are formed in which $SiO_4$ and $AlO_4$ are arranged randomly. At a higher $Al_2O_3$ content (50% and above), the homogeneity of the gel is destroyed: aluminum hydroxide is formed, which is transformed to $\gamma$-$Al_2O_3$ during annealing of the samples. The depolymerization of the $SiO_4$ tetrahedra of the silicate skeleton in the catalysts with low aluminum oxide content (below 50%) is due to the addition of aluminum in the fourth coordination. However, in samples with still higher aluminum oxide content (75-90% $Al_2O_3$), the nature of the depolymerization of the silicate skeleton is different.

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ACCESSION NR: AP4044391

During the annealing of aluminosilica catalysts up to 950C, the formation of mullite can be found only in samples containing 20-25% $Al_2O_3$. "The authors express their gratitude to V. A. Dzis'ko, M. S. Borisova and A. D. Makarov for discussion of the results, to N. V. Akimova for the preparation of the samples, and to L. A. Plyasova and L. A. Khripin for making the Debye diagrams and the thermograms of the catalyst samples." Orig. art. has: 1 figure and 2 tables.

ASSOCIATION: Institut kataliza SO AN SSSR (Institute of Catalysis, SO AN SSSR)

SUBMITTED: 24Feb64 ENCL: 00

SUB CODE: GC NO REF SOV: 007 OTHER: 002

Card 3/3

L 8494-66 EWT(1)/EWT(m)/EWP(j) IJP(c) RM

ACC NR: AP5026477 SOURCE CODE: UR/0195/65/006/005/0904/0908

AUTHOR: Karakchiyev, L. G.

ORG: Institute of Catalysis, SO AN SSSR (Institut kataliza SO AN SSSR)

TITLE: Structure of silicon dioxide-titanium dioxide catalysts

SOURCE: Kinetika i kataliz, v. 6, no. 5, 1965, 904-908

TOPIC TAGS: silicon dioxide, titanium oxide, silicate, deuterium oxide, crystal structure

ABSTRACT: The structure of $SiO_2$-$TiO_2$ catalysts was studied by x-ray analysis, IR spectroscopy, and thermography. The adsorption of $D_2O$ was used to study the bonds formed. It is found that the $SiO_2$-$TiO_2$ catalysts are amorphous to x-rays and consist of $SiO_4$ and $TiO_4$ tetrahedra. The maximum substitution of titanium atoms for silicon in the silicate structure occurs at 25 — 50% $TiO_2$ in the catalyst. As the $TiO_2$ content increases further, a free titanium dioxide phase (anatase) is formed in the samples. Depolymerization of the silicate framework takes place as a result of interstitial four-coordinated titanium and reaches saturation at a content of 25 —50% $TiO_2$ in the catalyst. No defects

Card 1/2 UDC 546.284'824-31-44